

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

PCT/JP2003/010814



525443

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 1349	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. PCT/JP2003/010814	International filing date ( <i>day/month/year</i> ) 27 August 2003 (27.08.2003)	Priority date ( <i>day/month/year</i> ) 30 August 2002 (30.08.2002)
International Patent Classification (IPC) or national classification and IPC C23C 16/30, C01G 1/12, 49/12, C07D 251/14		
Applicant SUZUKI MOTOR CORPORATION		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <u>1</u> sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>	
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>	

Date of submission of the demand 19 March 2004 (19.03.2004)	Date of completion of this report 19 November 2004 (19.11.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/010814

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages \_\_\_\_\_ 1-7 \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_, as amended (together with any statement) under Article 19
- pages\* 1, 8, 10-12 received by this Authority on 19 March 2004 (19.03.2004)
- pages\* 9,13 received by this Authority on 15.08.04
- ☒ the drawings:
- pages \_\_\_\_\_ 1/2-2/2 \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☒ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☒ the claims, Nos. \_\_\_\_\_ 2-7 \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (specify): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (specify): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (specify): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (specify): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP03/10814

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	1, 8-11, 13	YES
	Claims	12	NO
Inventive step (IS)	Claims	1, 8-11, 13	YES
	Claims	12	NO
Industrial applicability (IA)	Claims	1, 8-13	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

Document 1: New Vapor Phase Deposition of Pyrite Thin Films Using  $\text{FeCl}_3$  and  $\text{CH}_3\text{CSNH}_2$ , (N. Takahashi, et al.), Journal of Materials Science Letters, 2000, Vol. 19, No. 24, pages 2223 and 2224

Document 2: Preparation of Pyrite Thin Films by Atmospheric Pressure Chemical Vapor Deposition Using  $\text{FeCl}_3$  and  $\text{CH}_3\text{CSNH}_2$ , (N. Takahashi, et al.), Journal of Materials Chemistry, 2000, Vol. 10, No. 10, pages 2346-2348

(1) The subject matters of claims 1, 8-11 and 13 appear to involve an inventive step over the documents cited in the ISR.

The above-mentioned documents do not show that heating a thioamide compound at around  $368^\circ\text{C}$  produces a triamide compound and simple sulfur, and, in turn, the formation of simple sulfur facilitates the formation of a pyrite film. Accordingly, it would not be easy to derive the condition that the growth part is at a temperature of  $375\text{-}425^\circ\text{C}$  nor a feature wherein a metal sulfide thin film is manufactured under the conditions for the growth of a triamide compound, from the above-mentioned documents.

(3) The subject matter of claim 12 does not appear to be novel in view of documents 1 and 2 cited in the ISR.

The subject matter of claim 12 identifies metal sulfide thin films by a manufacturing method; however, those identified by a manufacturing method are considered to be the finally obtained substances. So, it is considered that the said subject matter is the same as those of documents 1 and 2 that describe metal sulfide thin films.

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

International application No.

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**Box No. VIII Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

(1) Claim 1 identifies metal sulfide thin films by a manufacturing method; however, how the compositions of such metal sulfide thin films are defined is unclear because such films are identified by a manufacturing method.